C-26 Fumonisin B<sub>1</sub>, NTP TR 496

 $\begin{tabular}{ll} TABLE~C3\\ Statistical~Analysis~of~Primary~Neoplasms~in~Male~Mice~in~the~2-Year~Feed~Study~of~Fumonisin~B_1\\ \end{tabular}$ 

	0 ppm	5 ppm	15 ppm	80 ppm	150 ppm
Harderian Gland: Adenoma					
Overall rate <sup>a</sup>	1/46 (2%)	0/8 (0%)	0/1 (0%)	0/9 (0%)	5/44 (11%)
Adjusted rate <sup>b</sup>	2.3%	0.0%	0.0%	0.0%	11.7%
Terminal rate <sup>c</sup>	1/40 (3%)	0/1 (0%)	0/0	0/0	5/40 (13%)
First incidence (days)	740 (T)	e	_	_	740 (T)
Poly-3 test <sup>d</sup>	P = 0.0466	P = 0.8706N	P = 0.9995N	P = 0.8645N	P = 0.0994
Harderian Gland: Adenoma or Carcinoma	ı				
Overall rate	1/46 (2%)	1/8 (13%)	0/1 (0%)	0/9 (0%)	5/44 (11%)
Adjusted rate	2.3%	29.7%	0.0%	0.0%	11.7%
Terminal rate	1/40 (3%)	0/1 (0%)	0/0	0/0	5/40 (13%)
First incidence (days)	740 (T)	725	_	_	740 (T)
Poly-3 test	P = 0.0894	P = 0.2609	P = 0.9995N	P = 0.8645N	P = 0.0994
Liver: Hepatocellular Adenoma					
Overall rate	9/47 (19%)	7/47 (15%)	7/48 (15%)	6/48 (13%)	8/48 (17%)
Adjusted rate	20.1%	16.4%	14.8%	14.2%	17.1%
Terminal rate	7/41 (17%)	6/40 (15%)	6/45 (13%)	5/37 (14%)	7/42 (17%)
First incidence (days)	563	667	668	585	738
Poly-3 test	P = 0.4980N	P = 0.4166N	P = 0.3479N	P = 0.3318N	P = 0.4637N
Liver: Hepatocellular Carcinoma					
Overall rate	4/47 (9%)	3/47 (6%)	4/48 (8%)	3/48 (6%)	2/48 (4%)
Adjusted rate	9.0%	7.1%	8.5%	7.2%	4.3%
Terminal rate	3/41 (7%)	2/40 (5%)	4/45 (9%)	3/37 (8%)	1/42 (2%)
First incidence (days)	685	708	740 (T)	740 (T)	691
Poly-3 test	P = 0.2398N	P = 0.5107N	P = 0.6092N	P = 0.5330N	P = 0.3116N
Liver: Hepatocellular Adenoma or Carcino	ma				
Overall rate	12/47 (26%)	9/47 (19%)	9/48 (19%)	9/48 (19%)	10/48 (21%)
Adjusted rate	26.8%	21.1%	19.0%	21.3%	21.3%
Terminal rate	10/41 (24%)	7/40 (18%)	8/45 (18%)	8/37 (22%)	8/42 (19%)
First incidence (days)	563	667	668	585	691
Poly-3 test	P = 0.4662N	P = 0.3341N	P = 0.2629N	P = 0.3675N	P = 0.3591N
Lung: Alveolar/Bronchiolar Adenoma					
Overall rate	6/48 (13%)	0/9 (0%)	0/2 (0%)	0/11 (0%)	6/48 (13%)
Adjusted rate	13.5%	0.0%	0.0%	0.0%	12.9%
Terminal rate	5/41 (12%)	0/1 (0%)	0/0	0/0	5/42 (12%)
First incidence (days)	654		_	— D. 0.400	738
Poly-3 test	P = 0.5535	P = 0.4831N	P = 0.7506N	P = 0.4687N	P = 0.5848N
Skin: Fibrosarcoma					
Overall rate	5/48 (10%)	1/11 (9%)	5/7 (71%)	4/14 (29%)	5/47 (11%)
Adjusted rate	11.0%	15.8%	71.4%	46.7%	10.8%
Terminal rate	2/41 (5%)	1/4 (25%)	4/6 (67%)	1/3 (33%)	2/41 (5%)
First incidence (days)	447	740 (T)	668	643	638
Poly-3 test	P = 0.2186N	P = 0.6405	P = 0.0001	P = 0.0329	P = 0.6198N

TABLE C3
Statistical Analysis of Primary Neoplasms in Male Mice in the 2-Year Feed Study of Fumonisin B<sub>1</sub>

	0 ppm	5 ppm	15 ppm	80 ppm	150 ppm
Skin (Subcutaneous Tissue): Fibrosarc	oma or Sarcoma				
Overall rate	6/48 (13%)	1/11 (9%)	5/7 (71%)	4/14 (29%)	5/47 (11%)
Adjusted rate	13.1%	15.8%	71.4%	46.7%	10.8%
Terminal rate	2/41 (5%)	1/4 (25%)	4/6 (67%)	1/3 (33%)	2/41 (5%)
First incidence (days)	447	740 (T)	668	643	638
Poly-3 test	P = 0.1576N	P = 0.6822	P = 0.0003	P = 0.0526	P = 0.4919N
All Organs: Malignant Lymphoma					
Overall rate	5/48 (10%)	2/48 (4%)	1/48 (2%)	5/48 (10%)	7/48 (15%)
Adjusted rate	11.3%	4.6%	2.1%	11.7%	14.8%
Terminal rate	5/41 (12%)	1/40 (3%)	1/45 (2%)	4/37 (11%)	6/42 (14%)
First incidence (days)	740 (T)	291	740 (T)	282	584
Poly-3 test	P = 0.0400	P = 0.2139N	P = 0.0871N	P = 0.6093	P = 0.4279
All Organs: Benign Neoplasms					
Overall rate	15/48 (31%)	8/48 (17%)	8/48 (17%)	8/48 (17%)	17/48 (35%)
Adjusted rate	33.0%	18.4%	16.9%	19.0%	36.4%
Terminal rate	11/41 (27%)	6/40 (15%)	7/45 (16%)	7/37 (19%)	16/42 (38%)
First incidence (days)	563	440	668	585	738
Poly-3 test	P = 0.0779	P = 0.0813N	P = 0.0583N	P = 0.1045N	P = 0.4518
All Organs: Malignant Neoplasms					
Overall rate	13/48 (27%)	10/48 (21%)	11/48 (23%)	16/48 (33%)	16/48 (33%)
Adjusted rate	28.5%	22.5%	22.9%	35.4%	33.3%
Terminal rate	9/41 (22%)	6/40 (15%)	8/45 (18%)	8/37 (22%)	10/42 (24%)
First incidence (days)	447	291	624	282	584
Poly-3 test	P = 0.0992	P = 0.3220N	P = 0.3529N	P = 0.3164	P = 0.3895
All Organs: Benign or Malignant Neo	olasms				
Overall rate	24/48 (50%)	16/48 (33%)	16/48 (33%)	21/48 (44%)	27/48 (56%)
Adjusted rate	52.0%	35.2%	33.3%	46.5%	56.3%
Terminal rate	19/41 (46%)	10/40 (25%)	13/45 (29%)	13/37 (35%)	21/42 (50%)
First incidence (days)	447	291	624	282	584
Poly-3 test	P = 0.0352	P = 0.0672N	P = 0.0514N	P = 0.3765N	P = 0.4172

(T)Terminal sacrifice

Number of neoplasm-bearing animals/number of animals examined microscopically

b Poly-3 estimated neoplasm incidence after adjustment for intercurrent mortality

Observed incidence at terminal kill

d Beneath the control incidence are the P values associated with the trend test. Beneath the exposed group incidence are the P values corresponding to pairwise comparisons between the controls and that exposed group. For all tissues except the liver, only the pairwise comparisons between the 150 ppm group and control group are unbiased; overall rates and all other pairwise comparisons may not be valid. The Poly-3 test accounts for differential mortality in animals that do not reach terminal sacrifice. A negative trend or a lower incidence in an exposure group is indicated by N.

e Not applicable; no neoplasms in animal group